



Residential Dock and Pier Management Recent Activities by NOAA's National Ocean Service



Background

Few issues confronting coastal managers are as divisive or difficult to manage as regulating the construction of private residential docks and piers. The number of dock permit requests has increased significantly over the last few decades and dock authorizations are now the single most frequently sought permit from coastal managers. For example, the number of dock permit requests received each year in South Carolina increased ten fold over the past two decades from 80 to over 800.

Many coastal managers and citizens are concerned about this proliferation of docks and the potential impacts numerous private docks may have on the environment, navigation, and the ability of the public to access the waterfront. Coastal zone managers expressed a need for credible, relevant, and high quality scientific analysis of the issue. In response, NOAA's National Ocean Service synthesized available information on environmental and aesthetic impacts of residential docks and piers (see below), and hosted a manager's meeting to discuss tools available for managing those impacts. This database is one way NOAA is sharing the results of that meeting.



The Science of Impacts from Small Docks

In January of 2003, NOAA's National Centers for Coastal Ocean Science (NCCOS) and the Office of Ocean and Coastal Resource Management (OCRM) sponsored an invitational workshop to review the state of scientific knowledge related to the impacts of small docks and piers. The workshop results are summarized in a report entitled "[Environmental and Aesthetic Impacts of Small Docks and Piers: Workshop Report.](#)" (www.nccos.noaa.gov/publications/notables.html#dp)

This workshop report provides a critical synthesis of potential consequences of the construction, presence, and use of small docks and piers on the coastal environment. Shading, contamination, and boating associated with docks are discussed, as well as navigation, aesthetic, and quality of life issues.

For further information contact Ruth Kelty at ruth.kelty@noaa.gov.

Dock and Pier Bibliography

As a result of the science workshop, NCCOS has established a web-based [bibliography](#) (<http://www3.nos.noaa.gov/forms/nccoslib/dpsearch.lasso>) of information on docks and piers.

The bibliography is searchable by author and title as well as the following keywords:

- vegetation, shading
- contaminants, pollution, CCA, water quality
- sediments, sedimentation
- recreation, boating, recreational uses, marinas, boating impacts, water craft, marinas
- navigation
- planning, public access, zoning, shoreline regulations
- construction, design



- visual impacts, VIA, visual assessment, aesthetics, quality of life, survey, perceptions, social science

The citations in the bibliography pertain to published literature and unpublished reports about various aspects of the biological, physical, chemical, ecological, and aesthetic impacts of small docks and piers. References were submitted by participants at the science workshop and others. NCCOS does not have copies of these articles. For further information or to add citations contact Ruth Kelty at ruth.kelty@noaa.gov.

Management Tools Related to Docks and Piers

In November of 2003, the Office of Ocean and Coastal Resource Management (OCRM), the Coastal Services Center (CSC) and the National Centers for Coastal Ocean Science (NCCOS), hosted a second invitational workshop to review management options, both regulatory and non-regulatory, related to small docks and piers. A summary of this workshop, entitled "[Management Tools to Minimize the Impacts of Residential Docks and Piers](http://coastalmanagement.noaa.gov/pdf/TCS_paper.pdf)," (http://coastalmanagement.noaa.gov/pdf/TCS_paper.pdf) is available. For further information, contact Allison Castellan at allison.castellan@noaa.gov.

Database of State Programs

The Office of Ocean and Coastal Resource Management (OCRM) and the National Centers for Coastal Ocean Science (NCCOS) have established a web-based, searchable, database to house summary information about how coastal states manage small docks and piers. The [database](#), ([hyperlink to "accessing database" section below](#)), allows states to enter information about the standards they use to manage residential docks and piers, focusing on:

- permitting;
- planning and zoning;
- leasing;
- acquisition;
- dock siting,
- design and construction requirements;
- available outreach materials on dock and pier management; and
- standard operating procedures for evaluating permit applications.



The database can be browsed or queried to allow coastal managers concerned about a particular impact of a dock or pier (*i.e.*, shading, aesthetics) to see the standards other states have developed to mitigate that impact and the laws that uphold them. Information in the database can also be used to develop new standard operating procedures (SOPs) and support denials when the impacts of a proposed project are unreasonable. By linking the science and management of residential docks and piers, the database will help state and local managers improve and justify their regulations, as well as their permitting and planning processes used to manage dock placement and design.

The database is not a dock and pier encyclopedia and does not provide an exhaustive list of dock management programs at the state, regional and/or local level. Instead, it offers a "flavor" of the different approaches and tools available to coastal users and managers. Input to the database was solicited at the State level and participation is voluntary. Therefore, not all states may be represented or have complete entries. County and municipal laws may not always be reflected.

Please contact the state directly if you would like to learn more detail about a specific program or regulation.

Accessing the database:

To browse or query the database click [here](#). (Note: Best viewed using Internet Explorer 5.0+)

To enter information into the database click [here](#). (Note: The ability to enter information is restricted to state and local coastal managers that have obtained a log-in and password from OCRM. If you are a state or local coastal manager and are interested in entering information about your state into the database, please contact Allison Castellan (allison.castellan@noaa.gov).

Instructions for using the database can be found [here](#) or under the "Help" button within the database.

For further information, contact Allison Castellan at allison.castellan@noaa.gov.

Inventory of Laws, Regulations, and Policies Related to Residential Docks

The Coastal Services Center (CSC) is compiling information about state dock management programs (statutes, regulations, and policies). The regional summaries include information from states about topics such as:

- Impacts of concern: environmental, navigation or public trust
- Statutory authorities
- State and local permitting processes
- Dock dimension standards
- Contact information for each state

Already completed is the summary for the four southeastern states of Florida, Georgia, South Carolina, and North Carolina. Underway are similar inventories for the rest of the Atlantic coast and the Pacific coast. For further information contact Melissa Patterson at melissa.patterson@noaa.gov.

Visual Impact Management

As a result of the November 2003 workshop, the National Centers for Coastal Ocean Science (NCCOS) funded the preparation of a publication on managing the visual impacts related to small docks. This paper is in preparation and should be released as an NCCOSS Technical Report before the end of 2004.

The paper addresses techniques in assessing visual impacts, summarizes the legal methods available for management of these impacts and provides case studies where visual impacts have been a major part of management actions. For further information contact Ruth Kelty at ruth.kelty@noaa.gov.

Dock Growth: Visualizing Alternatives

The Coastal Services Center (CSC) has partnered with the Massachusetts Office of Coastal Zone Management to develop a demonstration project that uses 3-D computer visualizations to illustrate how various development scenarios, including different levels of dock build-out, can change a shoreline's appearance and functionality. This technology can be used to predict aesthetic concerns, public access issues, and navigational impacts more easily. The project is expected to be complete in Fall 2005. For additional information contact Melissa Patterson with the CSC at melissa.patterson@noaa.gov or Truman Henson with MA CZM at truman.henson@state.ma.us.



Training Materials Related to Management of Small Docks

The National Centers for Coastal Ocean Science (NCCOS) and the Office of Ocean and Coastal Resource Management (OCRM) have contracted for the preparation of training materials related to the management of small docks. These materials should be available by the end of June 2005 and will take three forms:

1. A series of PowerPoint presentations related to various aspects of small dock management;
2. A parallel workbook targeted toward state and municipal officials to be used in training sessions; and

3. A “Train the Trainers” workshop to review the materials and make suggestions for their best use.

The PowerPoint presentations and supplemental workbook will address various topics including:

1. Introduction/Importance of Small Dock and Pier Management
2. Environmental Issues
3. Navigation Issues
4. Public Access Issues
5. Visual Impact Issues
6. Management Techniques (regulatory and non-regulatory)
7. Best Management Practices
8. Where/How to Get Additional Information and Technical Support

The intent of this project is to provide trainers with a basis for workshops that can be varied as to location, topic, and time allotted. One, several, or all of the elements could be utilized depending on the audience and needs of the workshop. The PowerPoint presentations will be designed so that they can be modified for regional training by incorporating local graphics, summaries of state or municipal management/regulatory programs, etc.

The workbook provides the audience with reference material to take away from the workshop and, hopefully, use in implementation of management measures related to small docks. For further information, contact Allison Castellan at allison.castellan@noaa.gov

Resources at a Glance

1. Environmental and Aesthetic Impacts of Small Docks and Piers (January 2003)
 - T [Workshop Report](#) (see existing link)
 - T [PowerPoint Presentation](#)(see existing link)
2. Management Tools to Minimize the Impacts of Residential Docks and Piers (November 2003)
 - T [Workshop Report](#) (see existing link)
 - T [PowerPoint Presentation](#)(see existing link)
3. [Searchable Dock and Pier Bibliography](#) (see existing link)
4. [Dock and Pier Database](#) (hyperlink to “accessing database section” above)
5. Alternatives for Coastal Development: Analysis of three different development scenarios
 - T [Docks](http://www.csc.noaa.gov/alternatives/docks.html) (<http://www.csc.noaa.gov/alternatives/docks.html>)
 - T [Social Indications](http://www.csc.noaa.gov/alternatives/social.html) (<http://www.csc.noaa.gov/alternatives/social.html>)--additional info on docks
 - T [Environmental Indications](http://www.csc.noaa.gov/alternatives/environmental.html) (<http://www.csc.noaa.gov/alternatives/environmental.html>)--additional info on docks